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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,433

03/01/2004

Douglas LaVere Moren

5399

7590

07/07/2005

Douglas L. Moren
6630 Dwight Way
Livingston, CA 95334

EXAMINER

GELLNER, JEFFREY L

ART UNIT

PAPER NUMBER

3643

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,433

Applicant(s)

MOREN, DOUGLAS LAVERE

Examiner

Jeffrey L. Gellner

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1 March 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

file

DETAILED ACTION

Acknowledgement is made of Applicant's IDS received 1 March 2004.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-19 are replete with issues that cause the claims to be indefinite. Each claim must be written as single sentence. The claims should not include parenthetical expressions (such as, (120-209F)). A claim can not be both a method and apparatus claim as described in the preamble of claim 13. A method claim can not depend upon an apparatus claim (for example, claim 15 depending upon claim 13). Method steps can not be included in an apparatus claim such as in claim 19.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3643

Claims 1, 2, 5-7, 13, 15, 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamann Jr. (US 5,611,369) in view of Makin (US 5,595,171).

As to claims 1, 5, 13, and 19, Hamann Jr. discloses a novel wet heat application apparatus (Figs. 1 - 4) capable of being used for agriculture soil preparation and vegetation management comprising a water absorbent mat (28 of Figs. 1 and 2) with high capillary capacity and heated by conductive heat exchange through pipe walls (12 of Figs. 1 and 2); and, a flexible, heat insulated and water impermeable liner (26 of Figs. 1 and 2) on the top surface of the mat, the apparatus capable of killing weeds, soil pathogens, and nematodes when in contact with the soil. Not disclosed is the water cycling through the pipe and heated to 120 to 209 F. Hamann Jr. however, discloses an apparatus for wet heating with the hot water recycled (12, 18a, and 18b of Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Hamann Jr. by adding recycling as disclosed by Makin when heating is the main objective so as to save water and to heat from 120 to 209 F depending upon degree heating needed. The apparatus is capable of being pulled by a wheeled means and performing the steps of claim 19 when pulled over soil.

As to claims 2, 6, and 15, Hamann Jr. as modified by Makin further discloses copper tubing (Makin at col. 3 lines 49-54) emitters (pores in "soaker tubes 12" of Hamann Jr.), and heater (12 of Makin). Not disclosed is the line at low pressure. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus of Hamann Jr. as modified by Makin by having the system operate at low pressure, 5 to 60 psi, depending upon specifications of the pump and piping.

Art Unit: 3643

As to claims 7 and 16, Hamann Jr. as modified by Makin further disclose a hot feed line (18a of Makin), a cool return line (18b of Makin), and storage tank (inherent in 12 of Makin), and method of reducing amount of flow (inherent in 12 of Makin).

As to claim 18, the limitations of claim 13 are disclosed and described above. Not disclosed is an insulated apron. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus of Hamann Jr. as modified by Makin by adding an insulated apron so as to conserve more heat so as to have a more efficient system.

Allowable Subject Matter

Claims 3, 4, 8-12, 14, and 17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Applicant should read and study the claims in the patents included in the instant application as a template for claim format compliant with PTO rules.

Conclusion

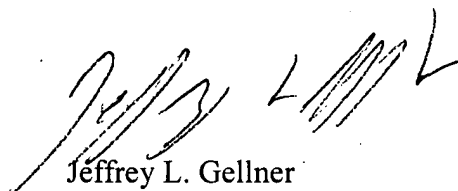
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gohl, Fasul, Jette, and Kuniyasu et al. disclose in the prior art various systems that are mobil an heat the soil. Ohmann, Yano et al., Tripp Jr., Dalle et al., Springer et al., Tompkins et al., Odenkirk, and Kline disclose in the prior art various heating units with mats.

Art Unit: 3643

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey L. Gellner whose telephone number is 571.272.6887. The examiner can normally be reached on Monday-Friday, 8:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on 571.272.6891. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jeffrey L. Gellner
Primary Examiner
Art Unit 3643